

NANOCOMPOSITES OF SILICON NITRIDE, SILICON CARBIDE, AND BORON NITRIDE

ABSTRACT OF THE DISCLOSURE

Densified composites of silicon nitride, silicon carbide, and boron nitride that exhibit high creep resistance are obtained by sintering a mixture of amorphous powders of silicon nitride, silicon carbide, and boron nitride in the presence of an electric field under high pressure. The grain size in the resulting composite is less than 100 nanometers for all components of the composite, and the composite exhibits high creep resistance.

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